

Serial No. 10/790,571

**IN THE SPECIFICATION:**

1. Please cancel the entire specification section labeled **Brief Summary of the Invention**,  
and replace with the following paragraph (showing changes made with "mark-  
ups"):

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## BRIEF SUMMARY OF THE INVENTION

The present invention utilizes permanent magnets to transmit variable or fixed torque between two rotating elements. The aforesaid permanent magnets are located on only one of the two rotating elements (also referred to as "rotors" or "rotary members"), and the other rotating element in a particular embodiment does not contain permanent magnets, but does have so-called "electro-conductive" elements. Said electro-conductive elements comprise materials and alloys that are not ~~permanent magnets~~ ferromagnetic, but that allow electron flow through them. In addition, so-called "magnetically permeable" materials are also contained on the said non-permanent magnet rotors, said magnetically permeable materials comprising substances that allow magnetic flux penetration and are also not ferromagnetic. The torque between the aforesaid two rotating elements is adjusted by mechanically varying the amount of magnetic flux passing between the elements by varying the extent to which the elements are axially overlapped. In a preferred embodiment of the apparatus, two concentric cylinders, one containing one or more rows of permanent magnets, is moved axially in order to progressively axially overlap a second cylindrical element containing electro-conductive elements and magnetically permeable elements, but not containing permanent magnets. This progressive axial overlapping of the two cylinders allows variation in the amount of magnetic flux intersecting the two concentric cylinders. This causes the amount of induced electrical current in the cylinder containing the electro-conductive elements to vary, which then causes the induced counter magnetic forces to vary. The magnetic forces and, thus, torque transmitted will vary based on the amount of axial

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overlap.

The proposed invention overcomes previous limitations by taking advantage of new technologies in magnet materials and provides a stable means of mechanically varying large amounts of transmitted torque without the need for large external current controls.